In [5]:
```
import pandas
```

In [63]:
```
df = pandas.read_csv('./county_summary.csv')
print(df)
```

```
         county  total_pop  pop_pov  perc_pov  pop_unempl  perc_unempl  \
0       Belknap    60392.0   6124.0      0.10      1654.0         0.03
1       Carroll    47416.0   4716.0      0.10      1234.0         0.03
2      Cheshire    76320.0   7813.0      0.10      2119.0         0.03
3          Coos    32219.0   4042.0      0.13      1069.0         0.03
4       Grafton    89164.0   9687.0      0.11      2200.0         0.02
5  Hillsborough   404948.0  34231.0      0.08     11849.0         0.03
6     Merrimack   147715.0  12150.0      0.08      3868.0         0.03
7    Rockingham   300365.0  15240.0      0.05      8774.0         0.03
8     Strafford   125913.0  11875.0      0.09      3953.0         0.03
9      Sullivan    43051.0   3812.0      0.09      1007.0         0.02

   pop_disblt  perc_dsblt    total_inc    avg_inc  avg_pillspp  min_pillspp  \
0      8601.0        0.14  1.962783e+09  32500.71        34.28        25.66
1      7762.0        0.16  1.587554e+09  33481.40        33.22        24.62
2     10239.0        0.13  2.360948e+09  30934.85        27.55        20.04
3      6071.0        0.19  8.205149e+08  25466.80        35.36        25.52
4     12064.0        0.14  3.028320e+09  33963.48        38.50        29.98
5     44397.0        0.11  1.458312e+10  36012.33        24.47        19.86
6     19744.0        0.13  4.852149e+09  32848.04        36.66        29.47
7     30383.0        0.10  1.244967e+10  41448.47        30.59        24.09
8     16004.0        0.13  3.852699e+09  30598.10        36.52        28.06
9      6136.0        0.14  1.315307e+09  30552.31        25.76        23.40

   max_pillspp  maxdiff_pillspp
0        38.28            12.62
1        40.70            16.08
2        30.47            10.44
3        42.18            16.66
4        43.88            13.90
5        27.55             7.68
6        39.74            10.26
7        34.60            10.51
8        41.10            13.04
9        28.40             4.99
```

In [79]:
```
df1 = df[['total_pop','perc_pov','perc_unempl','perc_dsblt','avg_inc','avg_pillspp
','maxdiff_pillspp']]
df1.corr()
```

Out[79]:

	total_pop	perc_pov	perc_unempl	perc_dsblt	avg_inc	avg_pillspp	maxdiff_pillspp
total_pop	1.000000	-0.705564	0.283434	-0.758501	0.714156	-0.422916	-0.418513
perc_pov	-0.705564	1.000000	-0.174782	0.883406	-0.843014	0.353535	0.564553
perc_unempl	0.283434	-0.174782	1.000000	-0.063330	0.066567	0.017204	0.317015
perc_dsblt	-0.758501	0.883406	-0.063330	1.000000	-0.812600	0.393511	0.634345
avg_inc	0.714156	-0.843014	0.066567	-0.812600	1.000000	-0.221290	-0.296586
avg_pillspp	-0.422916	0.353535	0.017204	0.393511	-0.221290	1.000000	0.732161
maxdiff_pillspp	-0.418513	0.564553	0.317015	0.634345	-0.296586	0.732161	1.000000

In [80]:
```
corr = df1.corr()
corr.style.background_gradient(cmap='RdYlGn',axis=None).set_precision(2)
```

Out[80]:

	total_pop	perc_pov	perc_unempl	perc_dsblt	avg_inc	avg_pillspp	maxdiff_pillspp
total_pop	1	-0.71	0.28	-0.76	0.71	-0.42	-0.42
perc_pov	-0.71	1	-0.17	0.88	-0.84	0.35	0.56
perc_unempl	0.28	-0.17	1	-0.063	0.067	0.017	0.32
perc_dsblt	-0.76	0.88	-0.063	1	-0.81	0.39	0.63
avg_inc	0.71	-0.84	0.067	-0.81	1	-0.22	-0.3
avg_pillspp	-0.42	0.35	0.017	0.39	-0.22	1	0.73
maxdiff_pillspp	-0.42	0.56	0.32	0.63	-0.3	0.73	1

In [ ]: